ABUG

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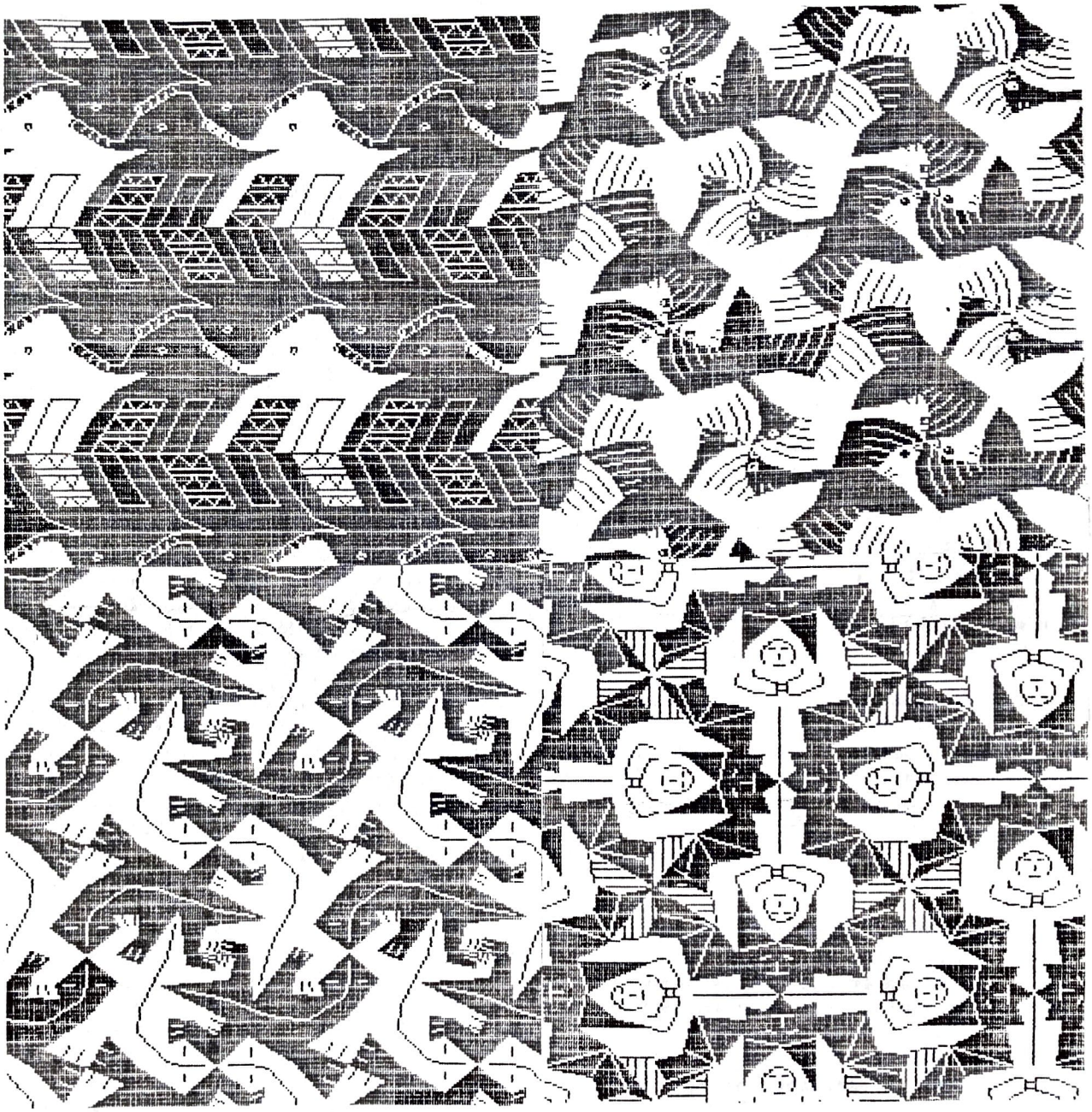

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Diary

January 2th	(The Hornblower)	Social
January 16th	(Park Baths)	Talk on modems by Steve Gold
February 6th	(The Hornblower)	Social
February 20st	(ITEC)	Visit to ITEC

This month's front page design is courtesy of Jim McGregor and Alan Watt. These illustrations are sample printouts from their excellent talk on tessellations at the last meeting. Jim McGregor gave an insight into an interesting area of creative design possible using a microcomputer. The software used is commercially available as 'Tesselator'. Two other software packages from McGregor and Watt are 'The Electronic Colouring Book' and 'Graphito', both graphics-orientated.
Also available at the meeting was the authors' copy of their latest book, which covers a lot of the material demonstrated, and a copy will be purchased for the library as soon as it is available.

To take advantage of the possibilities offered by such design applications, a means of obtaining hard copies is necessary. A screen dump to a dot matrix printer is rather limited and for serious use a colour plotter is ideal. Several months ago we featured a budget-priced plotter, and now we have the latest information.
The plotter is now called The Penman, from Penman Products, 8 Hazelwood Close, Dominian Way, Worthing, BN14 8NP. The price quoted is £217.00 + VAT, but does not include a cable or software. Until 31st January 1985, they are making a special offer of plotter, cable and software for £239.00 + VAT. If you wish to see the latest brochure or get any more details, then see John Bramwell.

Lots of people in the club are interested in computers in education, directly or indirectly, but previously we have had few articles offered on this subject. This month Carol Hounslow has kindly contributed an article on the present state of micros in primary schools, and we are very keen to receive a follow up article from anyone who has experience in secondary schools or colleges.

Micros in Primary Schools

The BBC Micro has been in Sheffield schools for quite some time now. The L.E.A. can boast that each school has at least one model B of its own. But how much real impact has been made by this new technological advance? In-service training has been scant, and does not prepare the teacher for the frustrations of the physical implementation of the hardware/software. The situation has not been helped by the initial flood of software, much of which contained basic educational flaws. The user who these programs were designed to be friendly with must be something between an immature businessman and a telepathic, literary genius.

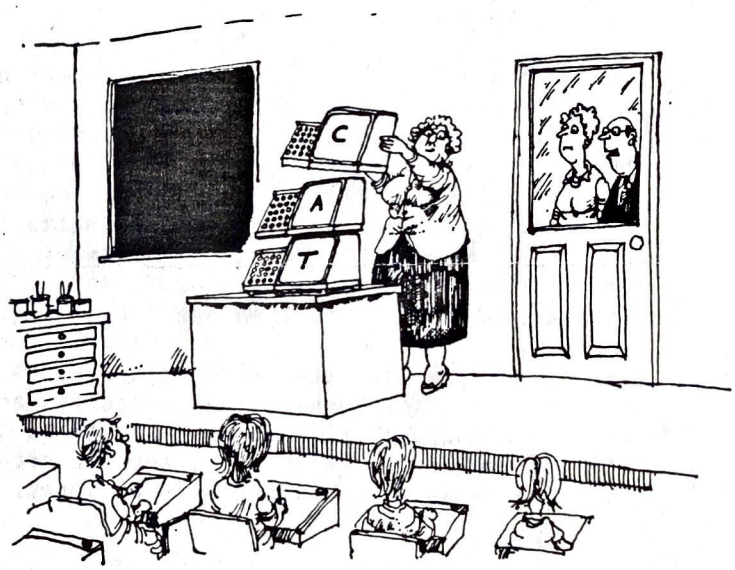
In some schools the Beeb, and its close friend the turtle, have captured the imagination of teachers and children alike and whole new areas of the curriculum have been created around selected programs. In others, staff are making a valiant attempt to utilise a tool which they know little about, with programs which seem to present the user with a myriad of trivial decisions which need to be made in order to obtain the dubious privilege of taking five seconds to fall down a hole in the dark! Based on the needs

and abilities of the children involved, two roles seem to have emerged. One is that of an alternative medium through which children may explore basic mathematical principles and extend their learning experiences beyond those created by the teacher. The other is as an automated tool for reinforcing skills and processes previously introduced by the teacher. Opinions are strictly divided and arguments arise as to which role should be accepted as correct.

Many teachers are still wandering around in the mists of confusion, or are completely disillusioned when faced with the reality of this great miracle which was foretold in a prophecy. Until more constructive assistance is made available concerning appropriate uses of the 'B' microcomputer it will not be fully integrated into the classroom and therefore will not fulfil its potential as a helpful resource. As yet it still remains a semi-justifiable drain on a teacher's limited supply of time and sanity.

Despite many traumas and frustrated moments, I still feel my pupils derive sufficient benefit of one form or another to justify the machine's presence in the classroom. But no matter how I try, there are certain questions which arise, that I really cannot fathom.

1. Why does it take 15 minutes to load a program and no time at all for little Johnny to lose it.
2. How are you supposed to react when, after spending 30 minutes after school putting the final touches to your pet program, the over-zealous caretaker cuts you off from the mains to plug her Hoover in?
3. How does Nigel ALWAYS manage to lose the score chart after his turn.
4. Why must they press every available button before they tell you something has gone wrong.
5. What property of the keyboard renders it irresistable to little fingers despite a blank screen.
6. Why isn't the break key permanently disabled?
7. How do you get past the troll at the crystal bridge without losing any treasure.
8. Would my lessons be more interesting if I stuck my head in a box, my fingers in an electric socket and sang Colonel Bogey every three minutes.



'We're hoping to get some more computers so we can teach them longer words.'

Answers on a £10 note please to Carol Hounslow

The Ideal DFS

As we mentioned last month, we have been compiling a list of grouses about the existing disc filing systems, and at the same time producing a specification for the 'ideal DFS'. Since nobody is likely to produce this for us, it has perhaps just been an academic exercise but one of the interesting findings was that most people mentioned features

which were in fact available on other systems. As a general guide we are including a list of the most popular 'desirable features' indicating if there is an existing DFS which includes each feature. It was assumed that all Acorn 0.90 DFS features were available as standard, but it should be mentioned that there is now a 1.2 version available on a 16K ROM which was developed for the second processors and incorporates the Econet Filing System. There is now a rumour that Acorn are using the DFS part of this chip in the latest machines and that this has some improvements to the 0.90 version.

1. No limit to the number of files per disc or the size of each file. (Kenda under CP/M, Watford gives 62 files and Microware 128 files)
2. A command to recover deleted files. (can be available on disc utility ROMs)
3. A linked file system which can store a file in several locations and thus avoids the 'can't extend' error. (Kenda under CP/M)
4. More than seven characters per filename with discrimination between upper and lower case.
5. Treating both sides of a double-sided drive as a single storage medium. (Kenda or Flex with 6809 second processor)
6. Commands to copy a file onto the same disc with a different name, and to move a file from one disc to another. Also with single drives, the ability to *COPY and *BACKUP between different sides of different discs.
7. A catalogue command which displays only specified directories and automatically indicates the space remaining on the disc. (Watford has a *HELP SPACE command to show remaining space and largest contiguous area)
8. No change in the setting of PAGE from the tape filing system. (Can be achieved with Solidisk or with a separate board called DFSE00)
9. Built in utilities, especially formatting, verifying (both data and disc integrity), disc/tape transfers, disc sector editing, and access by keywords to the 8271 disc controller chip. (Watford DFS and DDFS implement most of these, others are available on ROMs such as Disc Doctor)
10. The automatic recognition of disc type, i.e. 40 or 80 track, single or double density. (Microware, Solidisk DDFS, Watford DDFS)
11. Ability to deselect the DFS when using tape so that on a soft reset the tape filing system and current value of PAGE are preserved.
12. A more sophisticated security system for restricting access to files from unauthorised users.

The overwhelming conclusion from this exercise is that everybody wants to maintain compatibility with the current Acorn standard in spite of its limitations. All present attempts to implement a double density filing system have fallen foul of the compatibilty problem, with the possible exception of the Watford DDFS which has yet to be 'road tested'. This is particularly true of the Kenda DDFS which despite many good features is completely incompatible (directly) with Acorn.

For Sale

Seikosha GP100A mark 2.
50 cps, dot addressable,40 & 80 characters per line.
Paper, ribbons, cable and manual.
Mint condition (8 months old) : £120.00
R.W.Alderton, telephone Sheffield 20571

ATPL Sidewise ROMboard is available from Jon Fryer.